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PRESENCE OF NON-CALCIFIED PLAQUES ON CORONARY CT IN SUBJECTS WITH DIABETES MELLITUS CAUSED A HIGHER RISK PROGNOSIS FOR MAJOR CARDIAC EVENTS OVER A MEDIAN OF 74 MONTHS

Poster Contributions
Poster Sessions, Expo North
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Background: To evaluate the significance of non calcified plaques (NCP) on coronary CT for major adverse cardiac events (MACE), we followed subjects with NCP and analyzed coronary risk factors.

Methods: 113 consecutive patients who underwent coronary CT (Light speed Ultra 16) from 2003 to 2004 and who had NCP in the coronary arteries (85 male; mean age, 67 ± 9 years; hypertension (HT), 72%; diabetes mellitus (DM), 30%; hyperlipidemia (HL), 54%; smokers, 61%; obese, 35%), were included. The patients were followed for a median of 74 (mean 59.8 ± 33.6) months after CT.

Results: 9 had a MACE. Patients with DM had a higher risk of MACE (17.6%) than those without (3.8%; p=0.013) during the observation period. Significant differences between the subjects with and without DM were seen at each time point and when the whole period of follow up was compared with a Kaplan Meier analysis and log rank test (p=0.006). A Cox proportional hazards model was used to test the significance of DM as a predictor of MACE considering influence of age, HT, HL, smoking and obesity. This analysis revealed that DM was a significant predictor of MACE (Hazard ratio 5.42, p=0.021). But no significant differences between subjects with and without HT, HL, smoking and obesity were observed with a Kaplan Meier analysis and log rank test.

Conclusions: Among subjects with NCP on CT, subjects complicated with DM had a higher risk of MACE than without following a median of 74 months using a Kaplan Meier analysis and Cox hazard regression with a hazard ratio of 5.42.